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The Changes in the Management of Permanent Grasslands in the CR After Agriculture Restructuring at the End of the 20th Century

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The changes in the management of permanent grasslands in the CR after agriculture restructuring at the end of the 20th century

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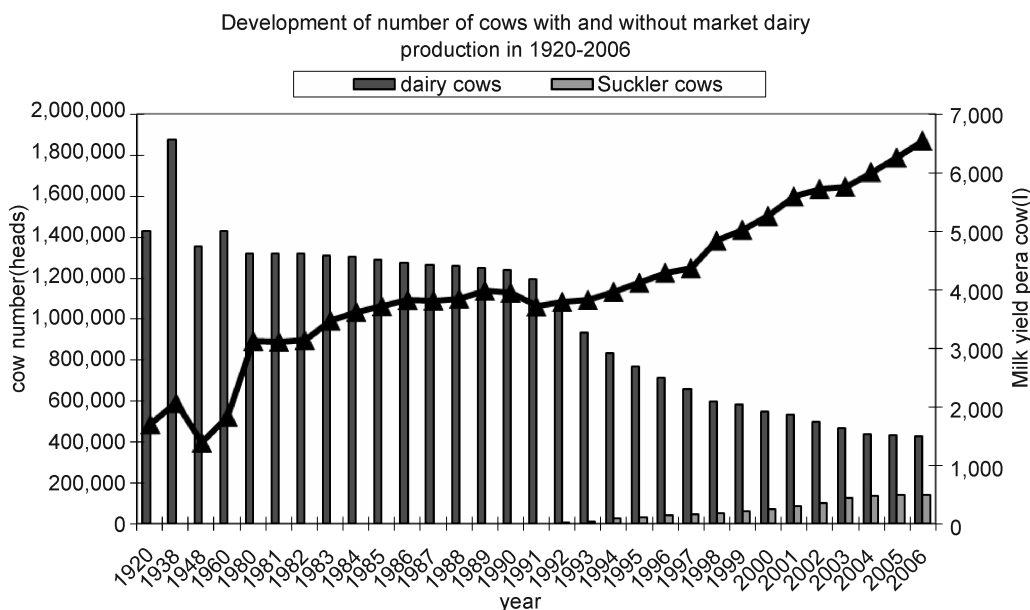
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Key words : permanent grassland, forage, cattle, milk cow, suckler cow

Introduction Permanent grasslands cover an area of 974,000 ha in the Czech Republic. However, there was a decrease in the number of livestock from 1,236 thousand cows in 1990 to 568,000 cows in 2006.

MaterialS and methods We used the method of analysis of long time series on the basis of CSO (Czech Statistical Office) data.

Results The results are presented in figure 1. After economic reconstruction in 1990 there was a sharp decrease of dairy cattle numbers from 1,236 thousand heads of cows in 1990 to 568,000 cows in 2006 with a simultaneous increase of milk yield from 3,950 l to 6,540 l per a cow a year. From 1995 the number of beef cattle increased to 151 thousand in 2006. The area of permanent grassland increased from 704 thousand ha to 974 thousand ha from 1990 till 2006 due to subsidies for planting pastures, which has a positive impact on the environment. However, forage use from grasslands decreased as a result of extensive utilisation (two-cut utilisation), which leads to low quality of forage and increases the need for feeding concentrates up to 0.30 kg kg⁻¹ FCM milk. Global price increase of grain in 2007 increased the price of concentrates, and their high consumption makes milk production more expensive, the solution is intensive 3 to 4-cut utilisation of grasslands (Kohoutek, Pozdíšek, 2007).



Conclusion It is necessary to intensify grassland utilisation for increased forage quality and decrease feeding concentrate in rations for dairy cattle and milk yield increases.

References

Kohoutek A. and Pozdíšek J. (2007) Simulation of grassland management when fodder is utilised by cattle and its environmental impacts in the Czech Republic. Grassland Science in Europe, vol. 12 -Permanent and Temporary grassland, Plant, Environment and Economy, proceedings of the 14th Symposium of the European Grassland Federation (A. De Vlieghe and L. Carlier eds). Ghent, Belgium, 3-5 September 2007, pp. 536-539.

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